

LAYERED FIBROUS MAT OF DIFFERING FIBERS AND CONTROLLED SURFACES
Application No. 10788,832
Atty.Dkt.: ZM921-04004

REMARKS

Reconsideration of the above referenced application is respectfully requested. Claims 22-29 and 33-44 are currently pending in the above referenced application. Claims 1-21 and 30-32 have been canceled.

35 U.S.C. §102 REJECTIONS

The Examiner has rejected claims 22-24, 26, 33, 38, 39, 41-42 and 44 under 35 USC §102(e) as being anticipated by HEALEY (US 2002/01877701). Applicant respectfully traverses the Examiner on this ground of rejection.

As Examiner is aware, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Examiner alleges that HEALEY discloses a filter media that includes a middle-filtering layer formed from at least one meltblown layer having different gradients of basis weight. Examiner then interprets that such different gradients of basis weight provides for gradients in porosity.

Applicant is currently claiming:

A mat of fibrous media comprising: at least a first layered mat portion of selected first fiber size distribution and permeability and at least a second layered mat portion of selected second fiber size distribution and permeability both said first and second layered mat portions being of substantially aligned fibers of first and second selected fiber size distributions and permeabilities *with each being attenuated as layers from spaced orifice sources directly to separate, spaced*

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similarly rotating collector sources with one of such sources receiving said layered mat portion from the other immediately preceding spaced rotating collector source. Claim 22.

A mat of fibrous filter media comprising: at least a first layered filter media mat portion of synthetic melt blown composition with approximate fiber size distributions being in the approximate range of zero point one (0.1) to twenty seven (27) micrometers and a permeability in the approximate range of five (5) to two thousand (2000) cubic feet per minute (cfm/ft²) and, a second successive layered filter media mat portion of synthetic melt blown composition with fiber size distributions being in the approximate range of one (1) to fifty (50) micrometers and permeability in the approximate range of thirty (30) to four thousand (4000) cubic feet per minute per square foot (cfm/ft²), *each layered portion having been attenuated as layers from selectively spaced melt blown orifice sources to separate spaced rotating collector sources with one of such sources receiving said layered mat portion from the other immediately preceding collector source. Claim 29.*

A fibrous filter media comprising a plurality of fibrous layers, said plurality of fibrous layers having a first and second fibrous layer, said first fibrous layer having a first fiber size distribution and first porosity, said second fibrous layer having a second fiber size distribution and second porosity, *said first and said second fibrous layers each being attenuated as layers from spaced orifice sources directly to separate, spaced similarly rotating collector sources with one of such sources receiving said layered mat portion from the other immediately preceding spaced rotating collector source. Claim 33.*

Claims 22, 29 and 33, as currently amended, each have the limitation of having the layers each being attenuated from spaced orifice sources directly to separate, spaced rotating collector sources as indicated in italics above. There is no teaching or suggestion in HEALEY of this claim limitation, hence, each and every element as set forth in the claim is not found, either expressly or inherently, in HEALEY. Additionally, the identical invention is not shown in as complete detail as is contained in the claims. Since HEALEY does not disclose attenuated layers as currently claimed, Applicant's Attorney respectfully requests this ground of rejection be withdrawn.

Regarding claims 23-24, 26, 38, 39, 41-42 and 44, these claims depend from one of the independent Claims 22, 29 and 33 and hence have the limitations as set forth above through

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claim dependency. Since these independent claims are currently in an allowable condition, Applicant's Attorney respectfully request that these rejections be withdrawn as well.

The Examiner has rejected claims 22-24, 26-29, 33-39, 41-42 and 44 under 35 USC §102(b) as being anticipated by EP 0960645 A2. Applicant respectfully traverses the Examiner on this ground of rejection. Examiner alleges that EP '645 reference discloses a three-layer vacuum cleaner bag construction that comprises a filtration grade meltblown layer with fibers with diameters in the range of 1-15 micrometers and air permeability of 100-1500 L/(m² x s) and a high bulk meltblown layer with fibers with diameters in the range of 5-20 micrometers and an air permeability of 300-8000 L/(m² x s). Examiner further alleges that a mode for producing meltblown material by attenuating the filaments upon formation is disclosed in EP '645.

Applicant is currently claiming the fiber layers each being attenuated from spaced orifice sources directly to separate rotating collector sources. EP '645 does not disclose attenuating fibers to a rotating collector. Since EP '645 does not teach attenuated layers as currently claimed, Applicant's Attorney respectfully requests this ground of rejection removed. Additionally, claims 23-24, 26-28, 34-39, 41-42 and 44, depend from one of the independent Claims 22, 29 and 33, each having said limitation, and hence have the limitations as set forth through claim dependency. Therefore, Applicant's Attorney respectfully request that these rejections be withdrawn as well.

The Examiner has rejected Claims 22-27, 33-34, 36, 38, 39-41 and 43 under 35 U.S.C. § 102(b) as being anticipated by HEALEY (WO 01/32292 A1). Examiner alleges that WO '292 discloses a filter media comprising a synthetic micro fibers polymer fine fiber wherein the diameter of the fibers is between about 0.8 to about 1.5 microns, a filter media composite that includes a coarse fiber layer, and a meltblown polymer fine fiber web which is mechanically

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entwined with coarse fiber layer. Examiner further alleges that WO '292 teaches a coarse synthetic micro fiber, e.g. meltblown, material which serves as a prefilter and has a fiber diameter between about 5 to about 20 microns and additional layers. Examiner then interprets that the mechanically entwined fibers read on the presently claimed entangled portions.

Applicant respectfully traverses the Examiner on this ground of rejection. Again, Applicant is currently claiming the fiber layers each being attenuated from spaced orifice sources directly to separate rotating collector sources. WO '292 does not disclose this claim limitation which either appears directly or through claim dependency in each and every claim as currently amended. Hence, Applicant's Attorney respectfully requests that this rejection be withdrawn.

35 U.S.C. §103 REJECTIONS

The Examiner has rejected claims 25, 40 and 43 under 35 USC §103(a) as being unpatentable over EP 0960645 A2 as applied above, and further in view of HEALEY. Specifically, Examiner admits that the EP '645 reference is silent to the entangling of the fibers but then alleges that HEALEY provides a similar fibrous filter media and teaches mechanically entwining the fibers to bond the layers. Examiner then alleges that it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the filter media and provide with it with mechanical entwining with the motivation of bonding the layers without the use of adhesives. Applicant respectfully traverses the Examiner on this ground of rejection. As previously set forth, Applicant is currently claiming the fiber layers each being attenuated from spaced orifice sources directly to separate rotating collector sources. Neither HEALEY nor EP '645 discloses this claim limitation which appears through claim dependency in claims 25, 40 and 43 as currently amended. Hence, Applicant's Attorney respectfully requests that this rejection be withdrawn as well.

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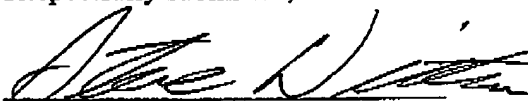
CONCLUSION

Applicant's Attorney believes that the instant application is now in condition for allowance and therefore respectfully requests that the Examiner withdraw the pending rejections. However, if the Examiner believes there are other unresolved issues in this case, Applicant's Attorney of record would appreciate a call at (502) 584-1135 to discuss such remaining issues.

Respectfully submitted,

Date:

11/14/05



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